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| 09/822,617  | 03/30/2001  | Daniel Luchaup       | 03226.090001/P5702       | 7135             |
| 32615   | 7590        | 08/24/2004           |                          |                  |
| OSHA & MAY L.L.P./SUN<br>1221 MCKINNEY, SUITE 2800<br>HOUSTON, TX 77010 |             |                      | EXAMINER<br>AZAD, ABUL K |                  |
|   |             |                      | ART UNIT<br>2654         | PAPER NUMBER     |
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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/822,617

**Applicant(s)**

LUCHAUP, DANIEL

**Examiner**

ABUL K. AZAD

**Art Unit**

2654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15,17,18,20 and 21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15,17,18,20 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This action is in response to the communication filed on June 8, 2004.
2. Claims 1-15, 17-18 and 20-21 are pending in this action. Claims 1, 5, 8, 12, 15, 17 and 20 have been amended. Claims 16 and 19 have been canceled.
3. In view of the applicants amendments the objection to specification is hereby withdrawn. Substitute Specification submitted by the applicant has been entered.
4. The drawings were received on June 8, 2004. These drawings are replacement-drawing sheets of the drawing filed on March 30, 2001.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-11, 15 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knittel (US 6,606,280), in view of Kuhn et al. (US 6,553,345).

Regarding claim 1 Knittel teaches, "a voice-translating remote control comprising":

"a microphone operable to receive a voice command and output a voice signal"  
(Fig. 2, element 45 a MIC to receive speech signal and deliver speech signal to device and base unit);

Art Unit: 2654

“an audio transmitter operably connected to the microphone to transmit an audio input signal to a host system based on the voice signal” (col. 4, lines 8-11, particularly reads on “it contains a microphone , amplification and filtering circuitry and a radio frequency (RF) transmitter. It also has an IR receiver and transmitter, collectively called the IR repeater; and col. 8, lines 1-29, particularly reads on “this output is then provide to an RF modulator 162 which is then transmits audio which has been received at the microphone through an internal antenna 163 to the base unit (host system)”);

“a signal receiver arranged to receive a command signal transmitted by the host system; and a signal transmitter operably connected to the signal receiver to transmit a control signal to an appliance based on the command signal” (col. 10, lines 21-26, particularly reads on “the spoken command is recognized, the base unit 200 (host system) sends the associated IR command or commands via its IR transmitter 244 to the remote unit (a signal receiver), which is turn sends those commands back to the target audio/video devices (appliance)”).

Knittel teaches voice operated remote control, but does not explicitly teach that voice command is nontrivial voice command. However, Kuhn teaches, a remote control operated by nontrivial voice command (col. 3, lines 9-17, and col. 3, line 66 to col. 4, line 10, here natural language understanding voice command reads on “nontrivial voice command” according to definition given at the background section of the specification). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use nontrivial voice command in the invention of Kinttel because Kuhn

Art Unit: 2654

teaches his invention allows sophisticated natural language speech commands to be given to those older audio-video components (col. 2, lines 3-6).

Claim 2 is set forth including the limitations of claim 1. Knittel teaches those limitations as indicated there.

Knittel further teaches, "wherein the signal transmitter is one selected from the group consisting of an infrared transmitter and a radio frequency transmitter" (col. 4, lines 8-22, particularly reads on "it contains a microphone, amplification and filtering circuitry and a radio frequency (RF) transmitter. It also has an IR receiver and transmitter, collectively called the IR repeater).

Claim 3 is set forth including the limitations of claim 1. Knittel teaches those limitations as indicated there.

Knittel further teaches, "wherein the audio transmitter transmits the audio input signal to the host system via wireless communication, and the host system transmits the command signal to the signal receiver via wireless communication" (col. 2, lines 7-12, wireless transmitter; and col. 4, lines 8-22, here RF and IR repeaters are wireless communication).

Claim 4 is set forth including the limitations of claim 1. Knittel teaches those limitations as indicated there.

Art Unit: 2654

Knittel further teaches, "further comprising a memory for storing appliance identity information" (col. 9, line 47 to col. 10, line 20, particularly reads on "upon detecting a match between incoming speech and characteristics of a spoken command, the control microprocessor is "pointed" to another address in RAM that stores digital information for each IR command to be transmitted, including device codes, and these are written by the microprocessor into buffer and driver circuitry for an IR transmitter"; here device codes are appliance identity information).

Claim 5 is set forth including the limitations of claim 4. Knittel teaches those limitations as indicated there.

Knittel further teaches, "further comprising a speech-recognition processor for extracting appliance identification information from the voice signal" (col. 9, line 47 to col. 10, line 20, particularly reads on "upon detecting a match between incoming speech and characteristics of a spoken command, the control microprocessor is "pointed" to another address in RAM that stores digital information for each IR command to be transmitted, including device codes, and these are written by the microprocessor into buffer and driver circuitry for an IR transmitter").

Knittel teaches voice operated remote control, but does not explicitly teach that voice command is nontrivial voice command. However, Kuhn teaches, a remote control operated by nontrivial voice command (col. 3, lines 9-17, and col. 3, line 66 to col. 4, line 10, here natural language understanding voice command reads on "nontrivial voice command" according to definition given at the background section of the specification).

Art Unit: 2654

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use nontrivial voice command in the invention of Kinttel because Kuhn teaches his invention allows sophisticated natural language speech commands to be given to those older audio-video components (col. 2, lines 3-6).

Claim 6 is set forth including the limitations of claim 1. Knittel teaches those limitations as indicated there.

Knittel further teaches, "further comprising a user interface" (col. 4, lines 1-11, a microphone to receive speech signal from user and col. 12, lines 37-47, a feedback audibly prompt is received via audio speaker are comprising a user interface).

Claim 7 is set forth including the limitations of claim 5. Knittel teaches those limitations as indicated there.

Knittel further teaches, "further comprising a user interface" (col. 4, lines 1-11, a microphone to receive speech signal from user and col. 12, lines 37-47, a feedback audibly prompt is received via audio speaker are comprising a user interface).

Regarding claim 8, Knittel further teaches, "a voice-translating remote control system comprising":

"a host system comprising a host receiver, a speech-recognition processor, and a host transmitter, wherein the host receiver is operably connected to the speech-recognition processor, which is in turn operably connected to the host

Art Unit: 2654

transmitter" (col. 4, lines 12-22, particularly reads on "it contains noise cancellation circuitry, a signal generator, a RF receiver, a speech recognition unit, a small computer and an IR receiver/transmitter pair("transceiver")"); "host system" reads on "base unit"); and

"a remote control comprising a microphone operable to receive a voice command and output a voice signal, an audio transmitter operably connected to the microphone to transmit an audio input signal to the host system based on the voice signal, a signal receiver arranged to receive a command signal transmitted by the host system, and a signal transmitter operably connected to the signal receiver to transmit a control signal to an appliance based on the command signal" (col. 4, lines 8-11, particularly reads on "it contains a microphone , amplification and filtering circuitry and a radio frequency (RF) transmitter. It also has an IR receiver and transmitter, collectively called the IR repeater; and col. 8, lines 1-29, particularly reads on "this output is then provide to an RF modulator 162 which is then transmits audio which has been received at the microphone through an internal antenna 163 to the base unit (host system)" and col. 10, lines 21-26, particularly reads on "the spoken command is recognized, the base unit 200 (host system) sends the associated IR command or commands via its IR transmitter 244 to the remote unit (a signal receiver), which is turn sends those commands back to the target audio/video devices (appliance)").

Knittel teaches voice operated remote control, but does not explicitly teach that voice command is nontrivial voice command. However, Kuhn teaches, a remote control operated by nontrivial voice command (col. 3, lines 9-17, and col. 3, line 66 to col. 4,



Art Unit: 2654

line 10, here natural language understanding voice command reads on “nontrivial voice command” according to definition given at the background section of the specification). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use nontrivial voice command in the invention of Knittel because Kuhn teaches his invention allows sophisticated natural language speech commands to be given to those older audio-video components (col. 2, lines 3-6).

Claim 9 is set forth including the limitations of claim 8. Knittel teaches those limitations as indicated there.

Knittel further teaches, “the remote control further comprising a user interface” (col. 4, lines 1-11, a microphone to receive speech signal from user and col. 12, lines 37-47, a feedback audibly prompt is received via audio speaker are comprising a user interface).

Claim 10 is set forth including the limitations of claim 8. Knittel teaches those limitations as indicated there.

Knittel further teaches, “wherein the audio transmitter transmits the audio input signal to the host system via wireless communication, and the host system transmits the command signal to the signal receiver via wireless communication” (col. 2, lines 7-12, wireless transmitter; and col. 4, lines 8-22, here RF and IR repeaters are wireless communication).

Claim 11 is set forth including the limitations of claim 8. Knittel teaches those limitations as indicated there.

Knittel further teaches, "wherein the signal transmitter is one selected from the group consisting of an infrared transmitter and a radio frequency transmitter" (col. 4, lines 8-22, particularly reads on "it contains a microphone, amplification and filtering circuitry and a radio frequency (RF) transmitter. It also has an IR receiver and transmitter, collectively called the IR repeater).

Regarding claim 15 Knittel teaches, "a voice-translating remote control comprising":

"a microphone to receive a voice command and output a voice signal" (Fig. 2, element 45 a MIC to receive speech signal and deliver speech signal to device and base unit);

"a first transmitter means operably connected to the microphone for transmitting an audio input signal to a host system based on the voice signal" (col. 4, lines 8-11, particularly reads on "it contains a microphone , amplification and filtering circuitry and a radio frequency (RF) transmitter. It also has an IR receiver and transmitter, collectively called the IR repeater; and col. 8, lines 1-29, particularly reads on "this output is then provide to an RF modulator 162 which is then transmits audio which has been received at the microphone through an internal antenna 163 to the base unit (host system)");

"a receiver means for receiving a command signal transmitted by the host system; and a second transmitter means operably connected to the receiver means for

Art Unit: 2654

transmitting a control signal to an appliance based on the command signal" (col. 10, lines 21-26, particularly reads on "the spoken command is recognized, the base unit 200 (host system) sends the associated IR command or commands via its IR transmitter 244 to the remote unit (a signal receiver), which in turn sends those commands back to the target audio/video devices (appliance)").

Knittel teaches voice operated remote control, but does not explicitly teach that voice command is nontrivial voice command. However, Kuhn teaches, a remote control operated by nontrivial voice command (col. 3, lines 9-17, and col. 3, line 66 to col. 4, line 10, here natural language understanding voice command reads on "nontrivial voice command" according to definition given at the background section of the specification). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use nontrivial voice command in the invention of Knittel because Kuhn teaches his invention allows sophisticated natural language speech commands to be given to those older audio-video components (col. 2, lines 3-6).

Knittel does not explicitly teach, "a user interface for validating the command signal". However, Kuhn teaches, "a user interface for validating the command signal" (col. 5, lines 48-50). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use a user interface for validating the command signal in the invention of Knittel because one of ordinary skill in the art would readily recognize that would provide a correct command transmission to view user's desire programs for maximum satisfaction.

Art Unit: 2654

As per claim 17, it is interpreted and thus rejected for the same reasons set forth in the rejection of claim 15.

Claim 18 is set forth including the limitations of claim 17. Knittel teaches those limitations as indicated there.

Knittel further teaches, "wherein transmitting the audio input signal to the host system is via wireless communication and transmitting the command signal to the remote control is via wireless communication" (col. 2, lines 7-12, wireless transmitter; and col. 4, lines 8-22, here RF and IR repeaters are wireless communication).

7. Claims 12-14, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knittel (US 6,606,280), in view of Kuhn et al. (US 6553,345).

Regarding claim 12 Knittel teaches, "a voice-translating remote control system comprising":

"a host system comprising a host receiver, a speech-recognition processor, and a host transmitter, wherein the host receiver is operably connected to the speech-recognition processor, which is in turn operably connected to the host transmitter" (col. 4, lines 12-22, particularly reads on "it contains noise cancellation circuitry, a signal generator, a RF receiver, a speech recognition unit, a small computer and an IR receiver/transmitter pair("transceiver")"); "host system" reads on "base unit"); and

"a remote control comprising a microphone operable to receive a voice command and output a voice signal, and an audio transmitter operably connected to the microphone to transmit an audio input signal to the host system based on the voice signal" (col. 4, lines 8-11, particularly reads on "it contains a microphone , amplification and filtering circuitry and a radio frequency (RF) transmitter. It also has an IR receiver and transmitter, collectively called the IR repeater; and col. 8, lines 1-29, particularly reads on "this output is then provide to an RF modulator 162 which is then transmits audio which has been received at the microphone through an internal antenna 163 to the base unit (host system)").

Knittel teaches voice operated remote control, but does not explicitly teach that voice command is nontrivial voice command. However, Kuhn teaches, a remote control operated by nontrivial voice command (col. 3, lines 9-17, and col. 3, line 66 to col. 4, line 10, here natural language understanding voice command reads on "nontrivial voice command" according to definition given at the background section of the specification). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use nontrivial voice command in the invention of Kinttel because Kuhn teaches his invention allows sophisticated natural language speech commands to be given to those older audio-video components (col. 2, lines 3-6).

Figures 1-8, does not explicitly teach the host system being capable of transmitting a control signal to an appliance. However, Figure 10, teaches the remote system and base unit a single-unit remote system, where recognized IR commands are directly wirelessly transmitted to the entertainment systems of interest. Therefore, it

Art Unit: 2654

would have been obvious to one of ordinary skill in the art at the time of the invention to wirelessly transmit IR commands directly to the entertainment systems of interest from the base unit, without transmitting back to the remote unit, since base unit recognized spoken command and produce associate IR command because one ordinary skill in the art would readily recognized that would provide better control the appliance by less distorted IR command signal and also provide quick action (less time to receive command by the appliances).

Claim 13 is set forth including the limitations of claim 12. Knittel teaches those limitations as indicated there.

Knittel further teaches, "wherein the audio transmitter transmits the audio input signal to the host system via wireless communication" (col. 2, lines 7-12, wireless transmitter; and col. 4, lines 8-22, here RF and IR repeaters are wireless communication).

Figures 1-8, does not explicitly teach the host system transmits the control signal to the appliance via wireless communication. However, Figure 10, teaches the remote system and base unit a single-unit remote system, where recognized IR commands are directly wirelessly transmitted to the entertainment systems of interest. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to wirelessly transmit IR commands directly to the entertainment systems of interest from the base unit, since base unit recognized spoken command and produce associate IR command because one ordinary skill in the art would readily recognized that would

Art Unit: 2654

provide better control the appliance by less distorted IR command signal and also provide quick action (less time to receive command by the appliances).

Claim 14 is set forth including the limitations of claim 12. Knittel teaches those limitations as indicated there.

Knittel further teaches, "wherein the host transmitter is one selected from the group consisting of an infrared transmitter and a radio frequency transmitter" (col. 4, lines 8-22, particularly reads on "it contains a microphone, amplification and filtering circuitry and a radio frequency (RF) transmitter. It also has an IR receiver and transmitter, collectively called the IR repeater).

Regarding claim 20, Knittel teaches, "a method for remotely controlling an appliance using voice commands comprising":

"receiving a voice command by a microphone in a remote control and outputting a voice signal" (Fig. 2, element 45 a MIC to receive speech signal and deliver speech signal to device and base unit);

"transmitting an audio input signal based on the voice signal to a host system comprising a host receiver, a speech-recognition processor, and a host transmitter" (col. 4, lines 12-22, particularly reads on "it contains noise cancellation circuitry, a signal generator, a RF receiver, a speech recognition unit, a small computer and an IR receiver/transmitter pair("transceiver")"); "host system" reads on "base unit");

“processing the audio input signal by the speech-recognition processor to generate a command signal” (col. 10, lines 21-26, particularly reads on “the spoken command is recognized, the base unit 200 (host system) sends the associated IR command or commands via its IR transmitter 244 to the remote unit (a signal receiver), which in turn sends those commands back to the target audio/video devices (appliance)”).

Knittel teaches voice operated remote control, but does not explicitly teach that voice command is nontrivial voice command. However, Kuhn teaches, a remote control operated by nontrivial voice command (col. 3, lines 9-17, and col. 3, line 66 to col. 4, line 10, here natural language understanding voice command reads on “nontrivial voice command” according to definition given at the background section of the specification). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use nontrivial voice command in the invention of Knittel because Kuhn teaches his invention allows sophisticated natural language speech commands to be given to those older audio-video components (col. 2, lines 3-6).

Figures 1-8, does not explicitly teach, wirelessly transmitting the command signal from the host system to the appliance. However, Figure 10, teaches the remote system and base unit a single-unit remote system, where recognized IR commands are directly wirelessly transmitted to the entertainment systems of interest. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to wirelessly transmit IR commands directly to the entertainment systems of interest from the base unit, since base unit recognized spoken command and produce associated IR command



Art Unit: 2654

because one ordinary skill in the art would readily recognized that would provide better control the appliance by less distorted IR command signal and also provide quick action (less time to receive command by the appliances).

Claim 21 is set forth including the limitations of claim 20. Knittel teaches those limitations as indicated there.

Knittel further teaches, "wherein transmitting the audio input signal to the host system via wireless communication" (col. 2, lines 7-12, wireless transmitter; and col. 4, lines 8-22, here RF and IR repeaters are wireless communication).

### ***Response to Arguments***

8. Applicant's arguments with respect to claims 1-15, 17-18 and 20-21 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2654

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Contact Information***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Abul K. Azad** whose telephone number is **(703) 305-3838**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richemond Dorvil**, can be reached at **(703) 305-9645**.

Any response to this action should be mailed to:

**Commissioner for Patents**

**P.O. Box 1450**

**Alexandria, VA 22313-1450**

Or faxed to:

**(703) 872-9314**

(For informal or draft communications, please label "PROPOSED" or "DRAFT")

Art Unit: 2654

Hand-delivered responses should be brought to 2121 Crystal Drive, Arlington,  
VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should  
be directed to the Technology Center's Customer Service Office at telephone number  
**(703) 306-0377.**

Abul K. Azad

August 18, 2004

A-K. Azad  
8/23/04